

REMARKS/ARGUMENTS

The Office Action dated June 8, 2010 has been carefully considered. Claims 12, 13, 15, 16, 19-26 are pending in the application, with claims 12 and 16 and 20 being the only independent claims. Claims 12 and 20 have been amended. Claim 16 has been canceled. No new matter has been added. Reconsideration of the application, as amended herein and in view of the following remarks, is respectfully requested.

Claim Objections

Applicant respectfully submits that the foregoing amendment to claim 16 corrects the noted informalities and overcome the objections listed in the Official Action. In view of the amendments, withdrawal of the objections to claim 16 is respectfully requested.

Claim Rejections

35 USC §112

Claims 16-17 and 19 were rejected as under 35 U.S.C. §112, second paragraph as being incomplete for omitting essential steps. Responsive to the rejection under 35 U.S.C. §112, Applicant respectfully submits that that the foregoing amendment to claim 16 is believed to overcome the rejection.

Claims 20-26 were also rejected as under 35 U.S.C. §112, second paragraph as indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Responsive to the rejection under 35 U.S.C.

§112, Applicant respectfully submits that that the foregoing amendment to claim 20 is believed to overcome the rejection.

In view of the amendments to claims 16 and 20 withdrawal of the rejection under 35 U.S.C. §112 is respectfully requested.

35 USC §101

Claims 12, 13, 15-17 and 19 have been rejected under 35 USC §101 as being directed towards non-statutory subject matter. Claim 12 and 16 has been amended. Applicant respectfully submits that amended claims 12 and 16, and thus dependent claims 13, 15-17, and 19, is currently directed towards statutory subject matter and thus, withdrawal of the rejection under 35 USC §101 is respectfully requested.

Patentability of the Claims – 35 USC §103(a)

Independent Claim 16

Claim 16 stands rejected under 35 U.S.C. §103(a) as being unpatentable over US Patent No. 7,505,809 by Strommer et al. (hereinafter referred to as “*Strommer*”) in view of Least Squares VCG Loop Alignment by Astrom (hereinafter referred to as “*Astrom*”).

Applicant respectfully submits that claim 16, as amended, is not obvious with respect to *Strommer* in view of *Astrom* because neither *Strommer* or *Astrom* alone or in combination, teach or suggest registering, via a processor in communication with the probe, a location of a first heart vector from a the first data set relative a lead system at a skin surface of an imaged subject, wherein the first heart vector represents a summation of electrical currents at a particular time, the summation having a direction and an

amplitude, registering, via the processor, a location of a second heart vector from the second data set relative to the lead system, and adjusting the size or position of the image dependent on a change in the location of between the first and second heart vector generated from the first and second data sets, respectively, registering a representation of the probe with the image, the probe being located in or adjacent to the heart. *Emphasis added.*

In particular, *Strommer* fails to disclose or suggest adjusting the size or position of the image dependent on a change in the location of between the first and second heart vector generated from the first and second data sets. Rather, *Strommer* only describes a registering step. At column 18, lines 4-19, *Strommer* describes that a first set of coordinates is registered with the second set of coordinates. Registering module 112 retrieves data respective of a set of coordinates (coordinate system I) of a first image 134 and coordinates of body position and orientation in the first coordinate system. Registering module 112 also receives a set of coordinates (coordinate system II) of second image 150 and coordinates of body position and orientation in a second coordinate system, from second imager 108. Registering module 112 registers first image 134 in coordinate system II and as a result, with second image 150, by registering the coordinates of body position and orientation detector 130 in coordinate system I, with the coordinates of body position and orientation detector 130 in coordinate system II. While *Strommer* describes that body position and orientation from coordinate system I and II are registered, no adjustment of the size or position of the image dependent upon changes in the location of the coordinate system I with coordinate system II is described. Registration, as described in *Strommer*, is not analogous to adjustments the size or

position dependent upon change of location of vectors. Rather, the registration in *Strommer* is mere registration of two images. T

Further to this point, while in the Official Action the Examiner states that the registration describe at col. 18, lines 4-19 is analogous to the adjusting step of claim 16 of the present application and Applicant respectfully disagrees with the Examiner, even if it were, it is not dependent upon change between body positions. Rather, it is dependent upon the first and second imagers 106 and 108.

As the Examiner acknowledges, *Astrom* does not teach that the image is adjusted dependent on a change in the location between the first and second heart vector generated from the first and second data sets. While *Astrom* does describes use of the least squares method to register data sets, it does not teach or describe adjusting the image dependent on the change in first and second vectors. In *Astrom*, it is assumed that VCG loop is related to another loop (a reference loop). The reference loop is an estimated by averaged beats or by recursive updating of the averaged beats. A normalized least-square estimation and an angle estimation is performed. Then, to detect body position changes, an un-normalized least-square estimation is performed, however, large estimation errors were detected, so an alignment method was used. Adjustments to the registered image are not described.

In view of the foregoing, withdrawal of the 35 U.S.C. §103(a) rejection of claim 1 is respectfully requested. In addition, Applicant submits that claim 19 is patentable by dependency.

Conclusion

In view of the foregoing, Applicants respectfully submit that the application is in condition for allowance, and such action is respectfully requested.

It is believed that no fees or charges are required at this time in connection with the application. However, if any fees or charges are required at this time, they may be charged to our Patent and Trademark Office Deposit Account No. 09-0470.

Respectfully submitted,

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